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PhenoSense™ HIV Resistance Test Vector

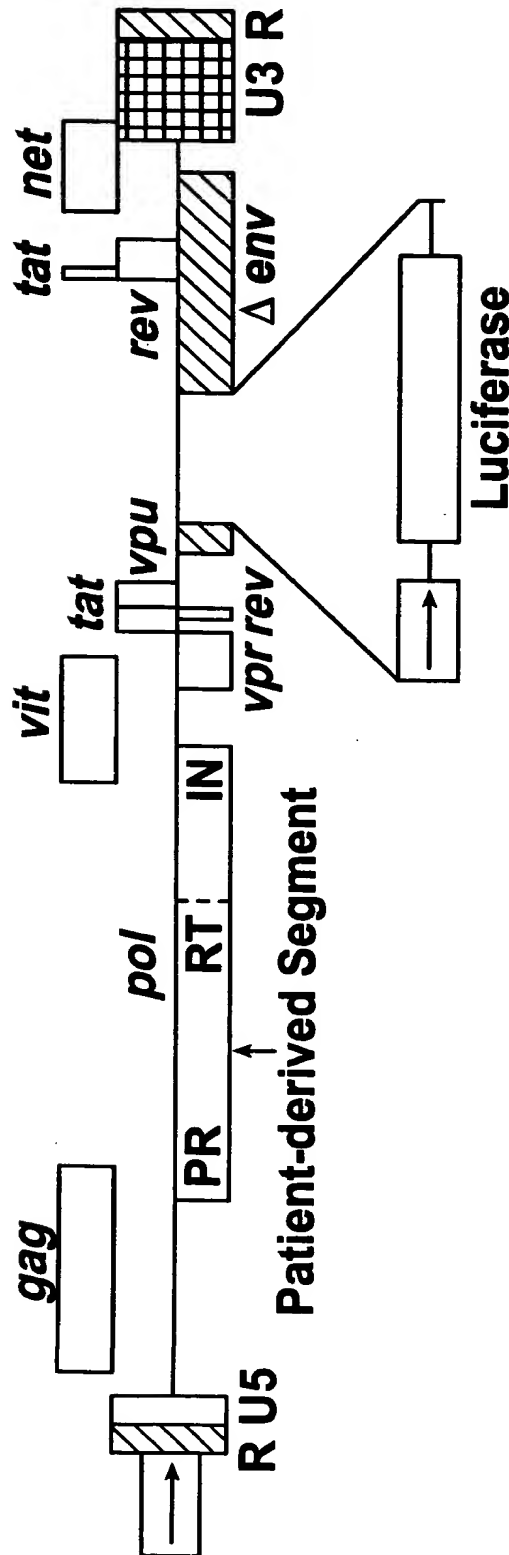


Fig. 1

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PhenoSense™ Schematic Diagram

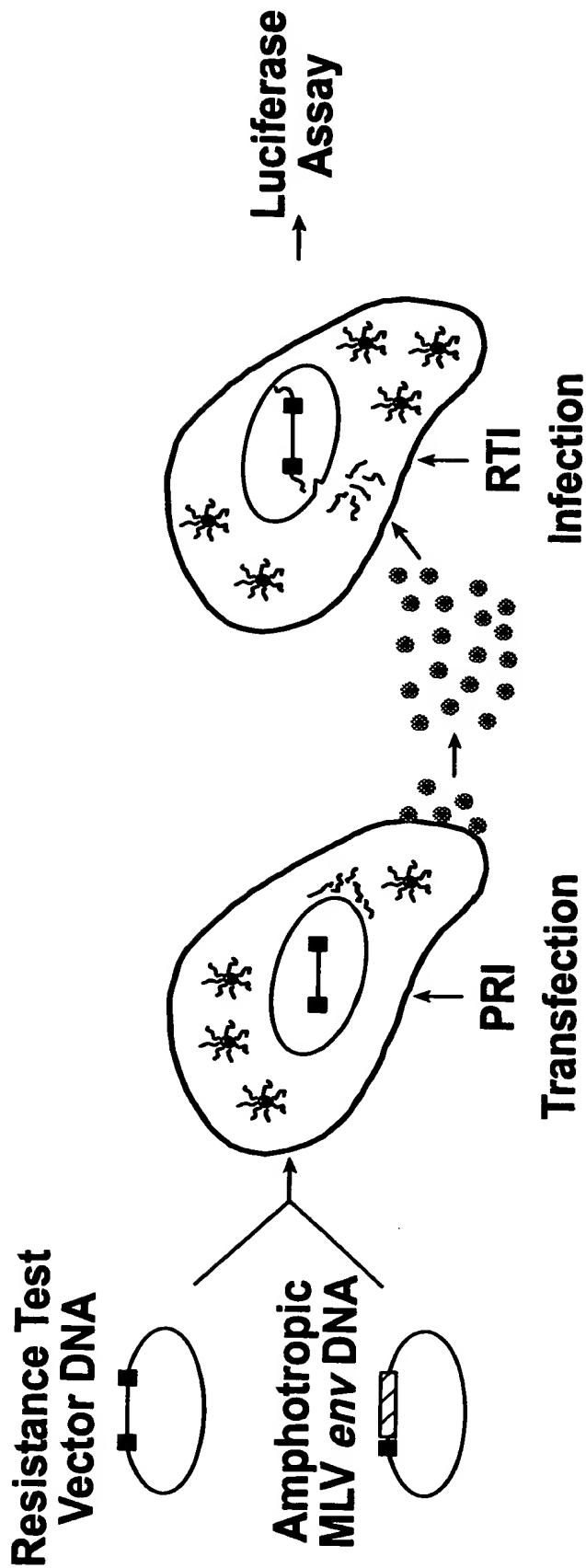


Fig. 2

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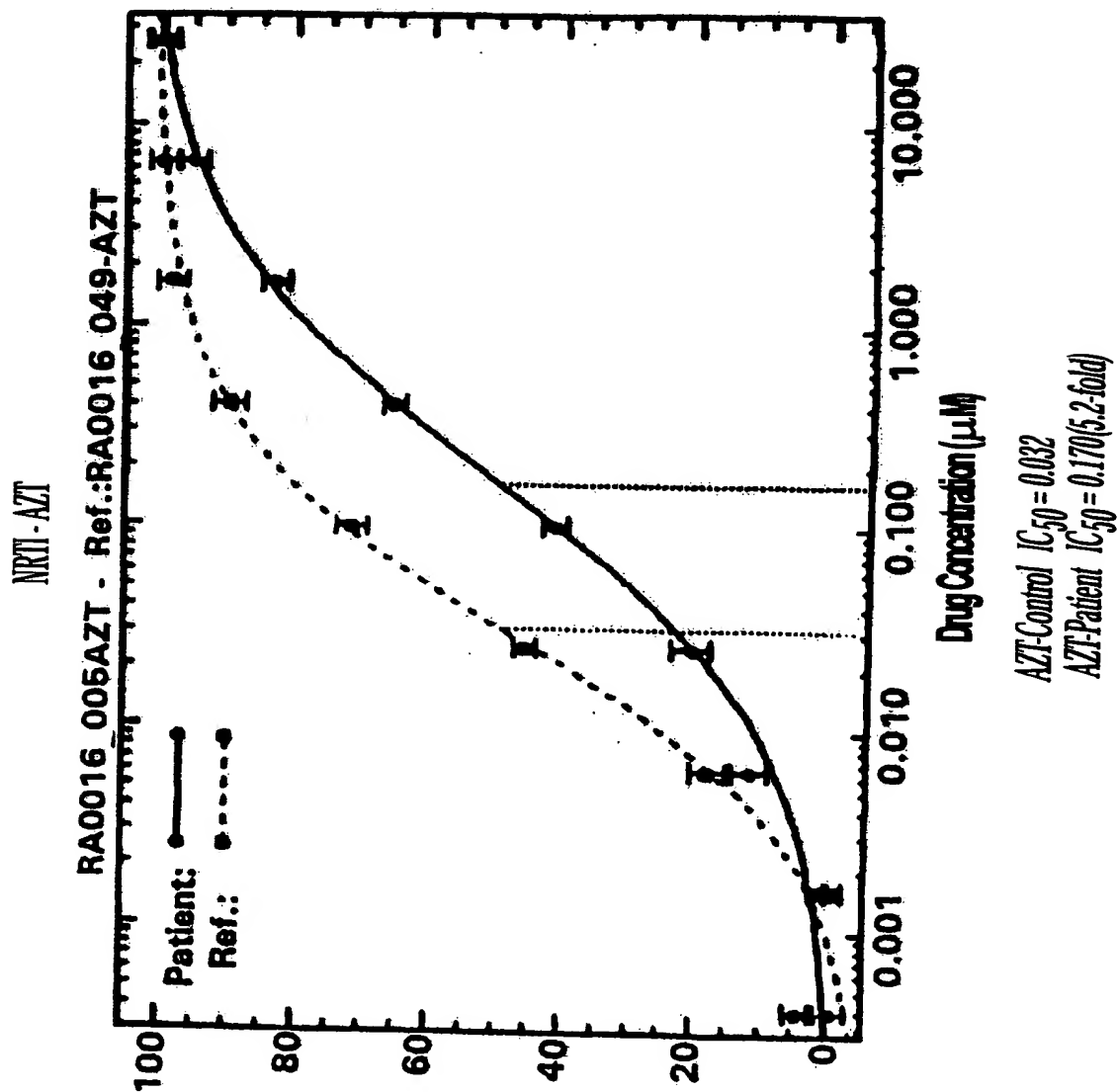


Fig. 3A

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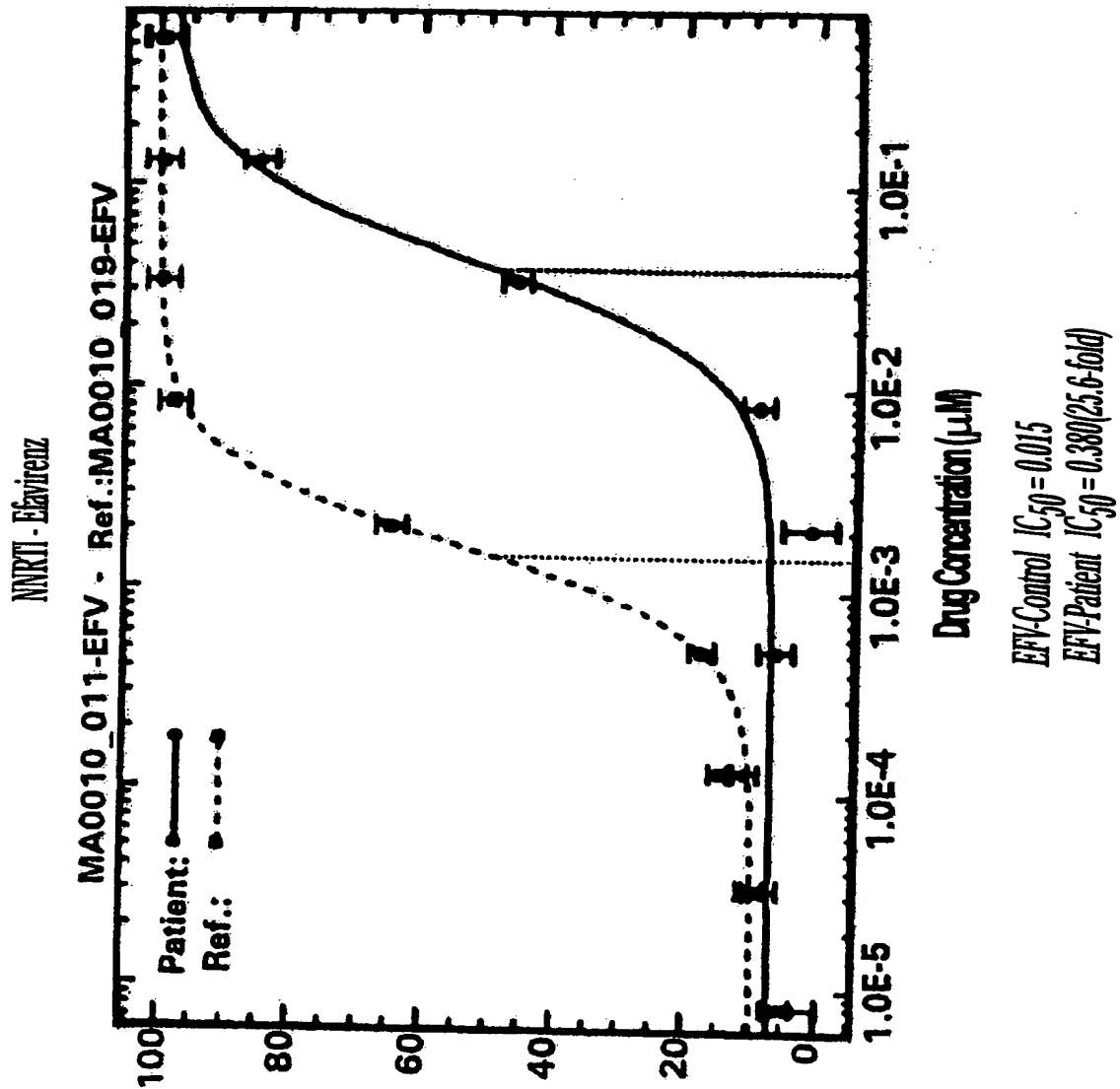
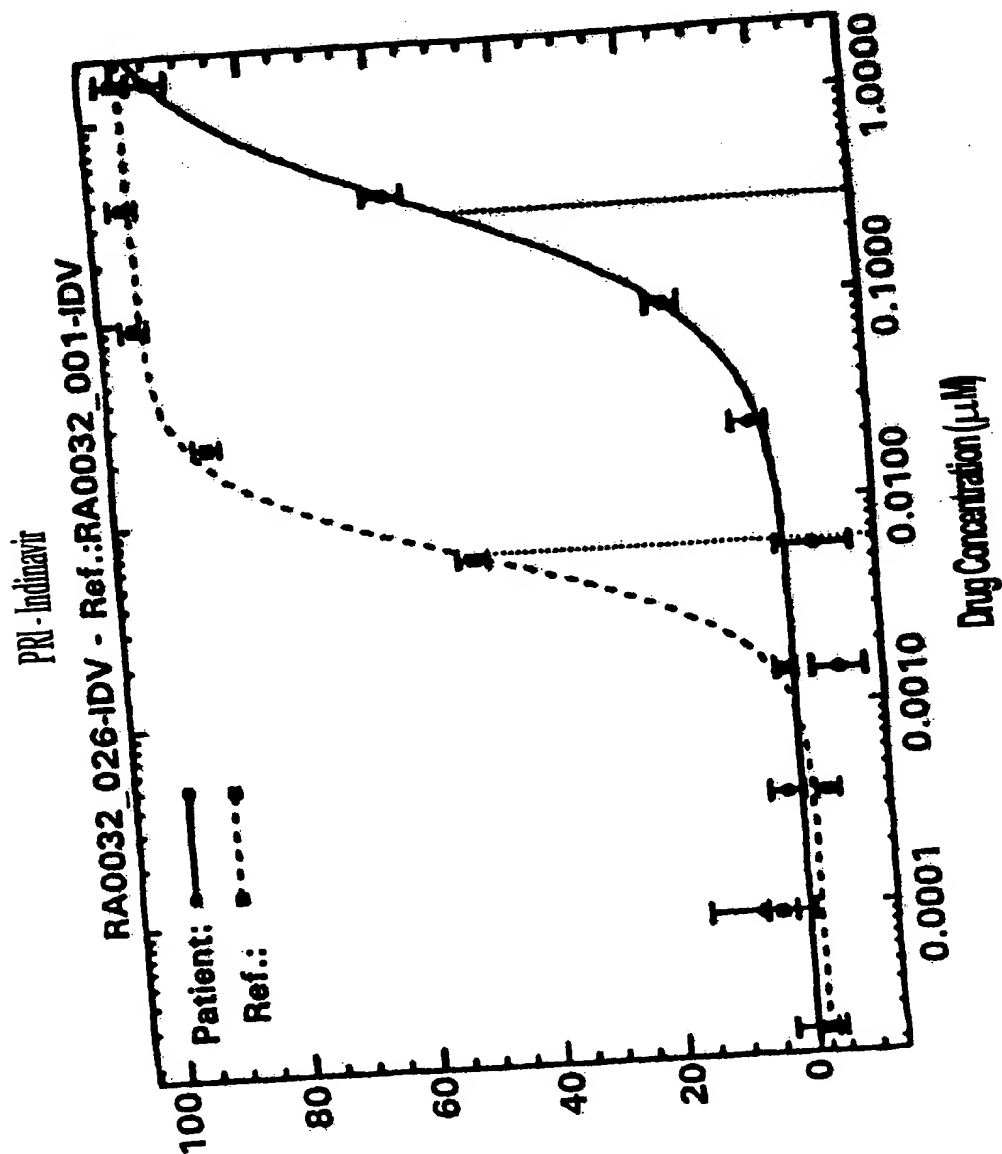


Fig. 3B

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IDV-Control $IC_{50} = 0.0062$
 IDV-Patient $IC_{50} = 0.2935$ (47.4-fold)

Fig. 3C

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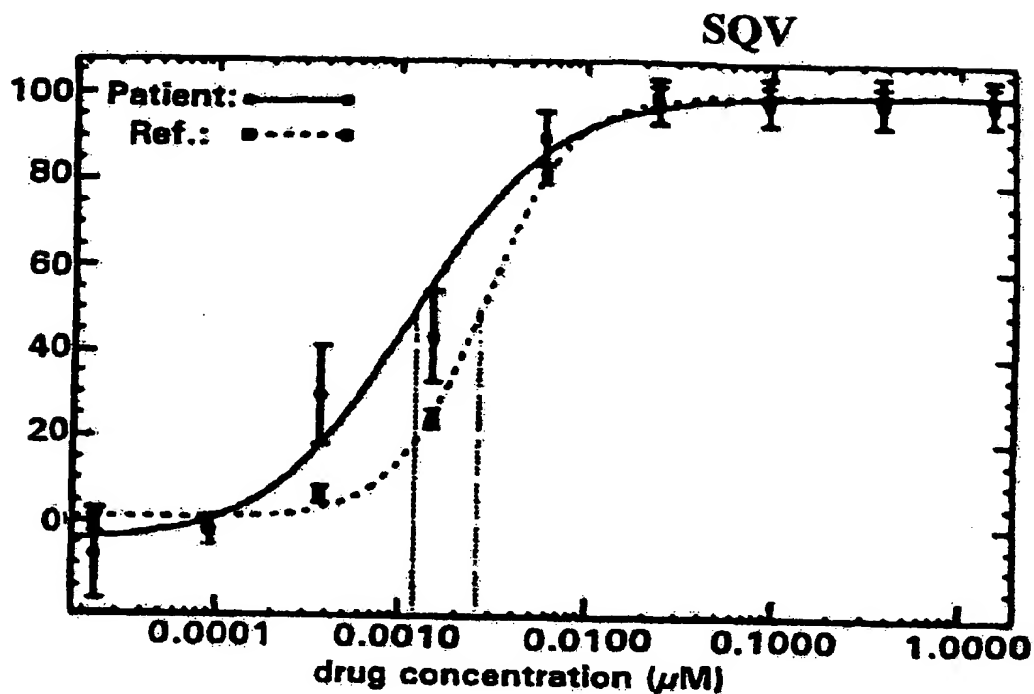


Fig. 4A

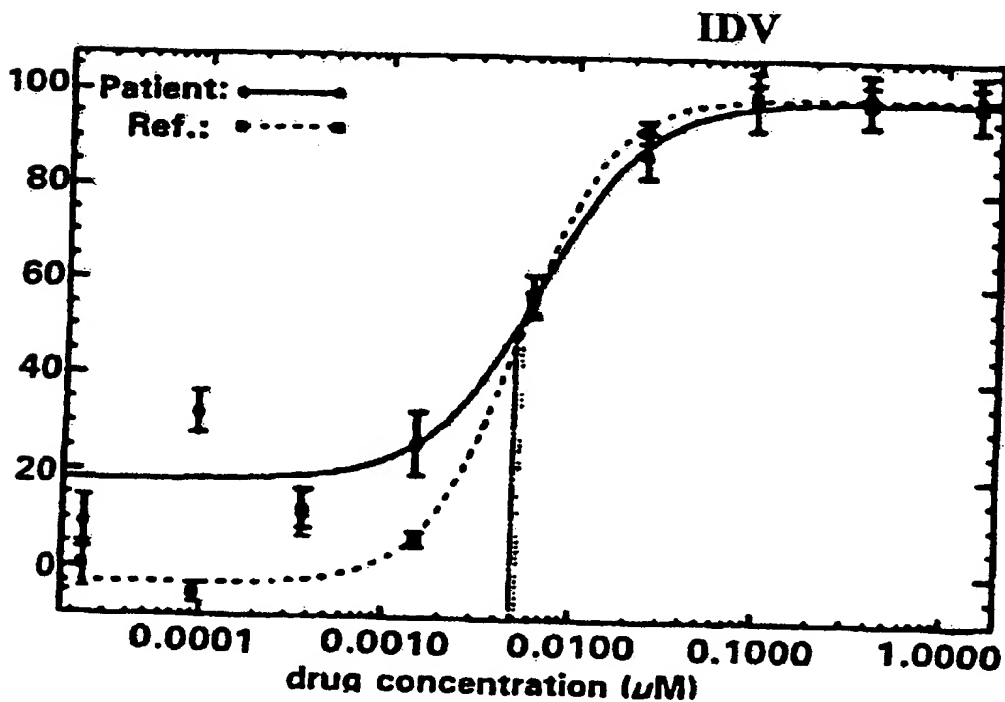


Fig. 4B

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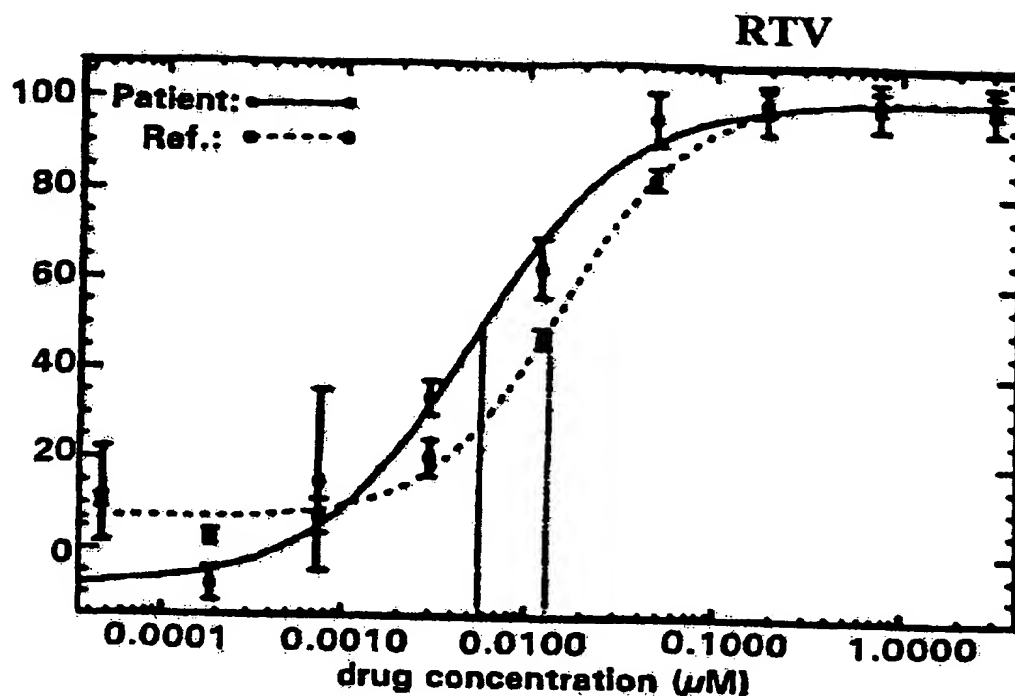


Fig. 4C

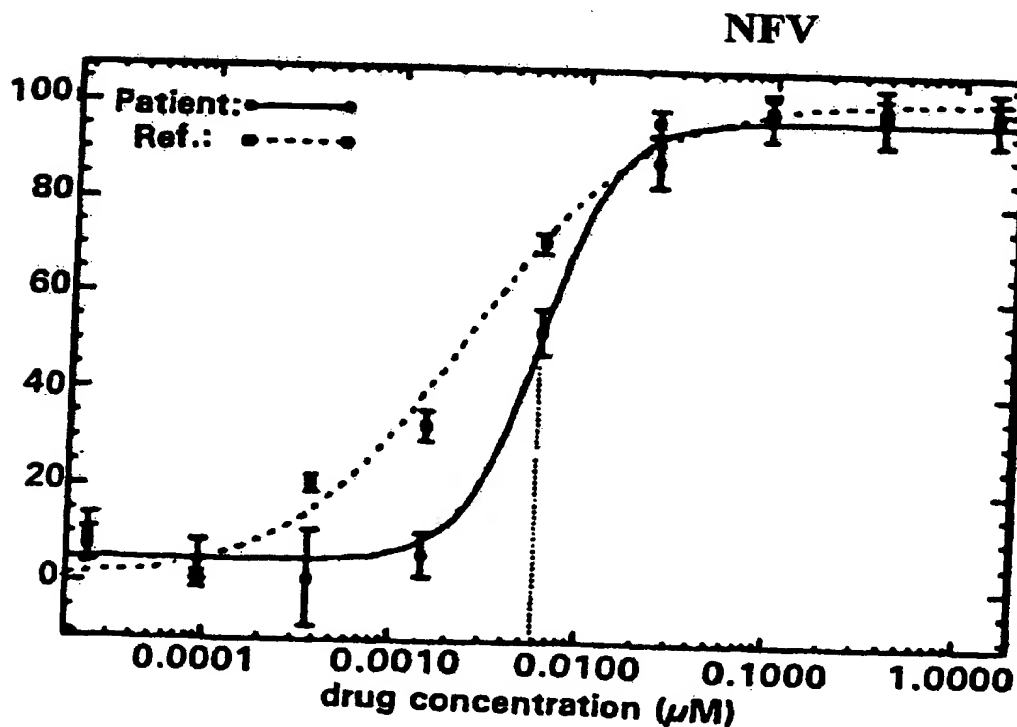


Fig. 4D

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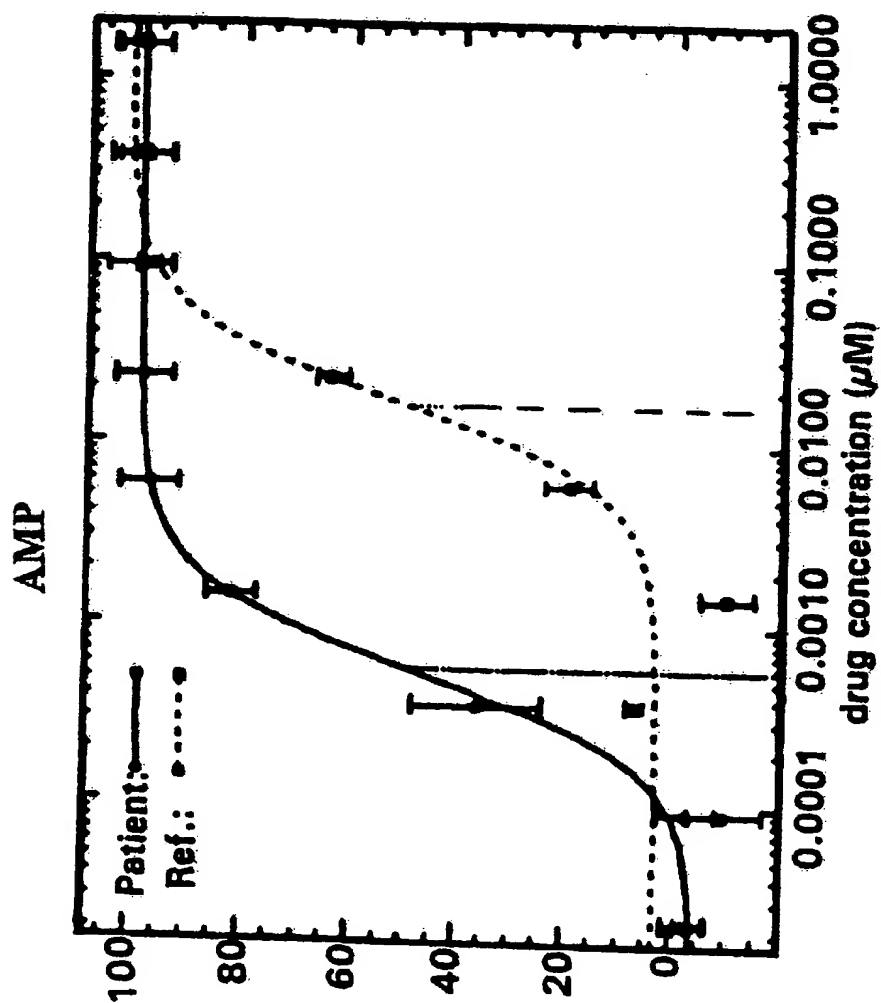


Fig. 4E

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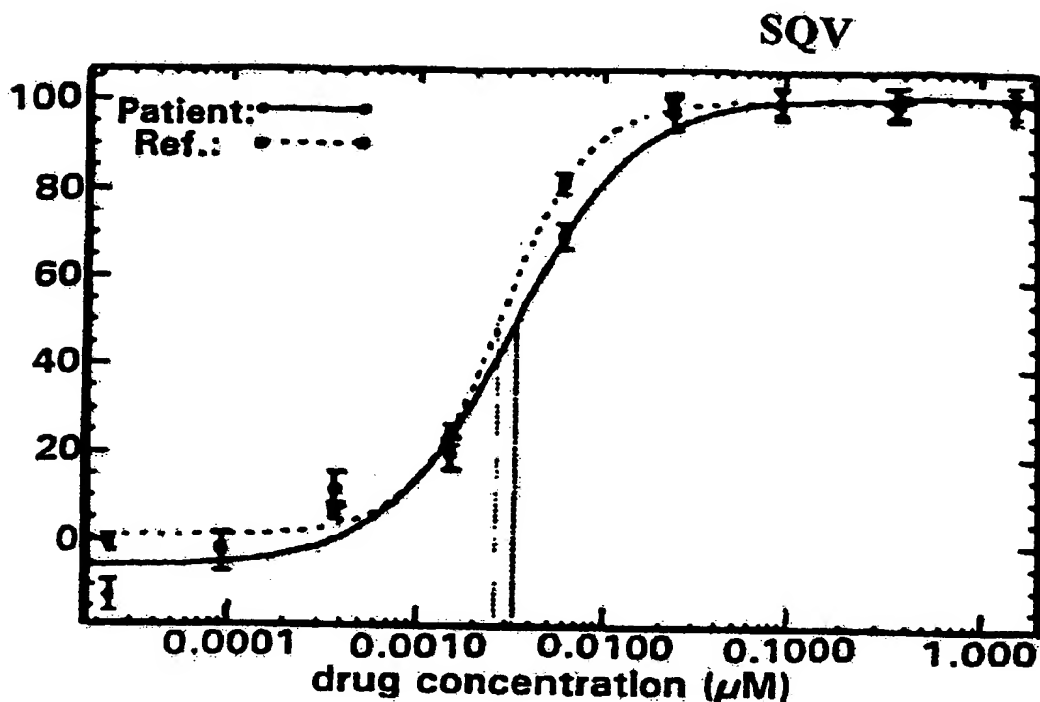


Fig. 5A

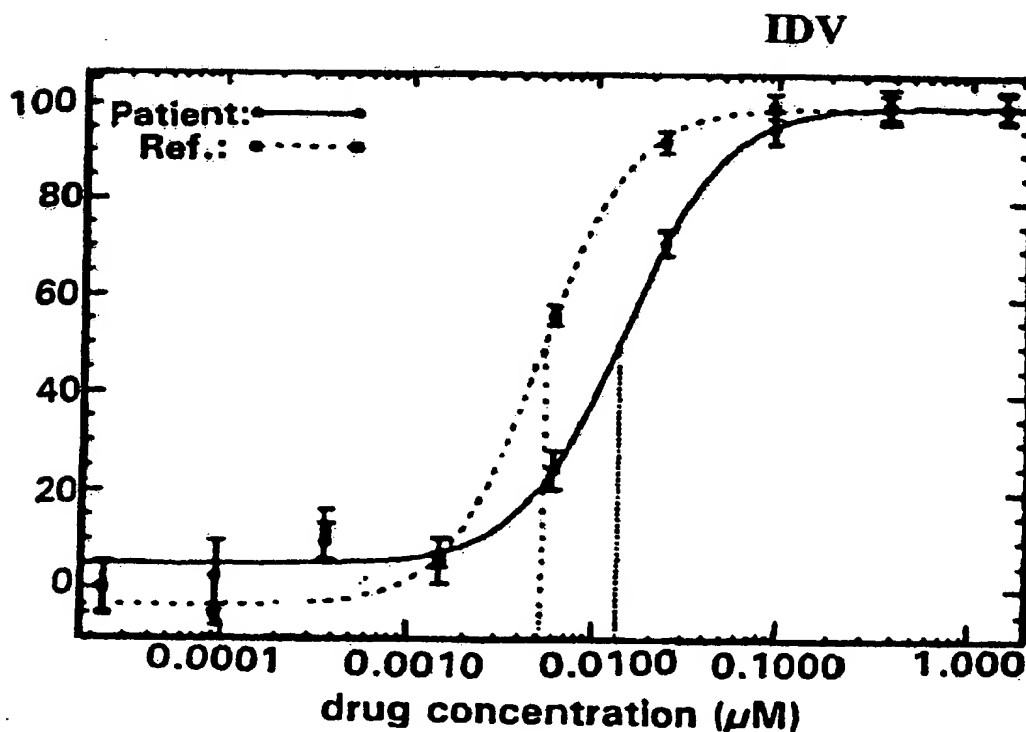


Fig. 5B

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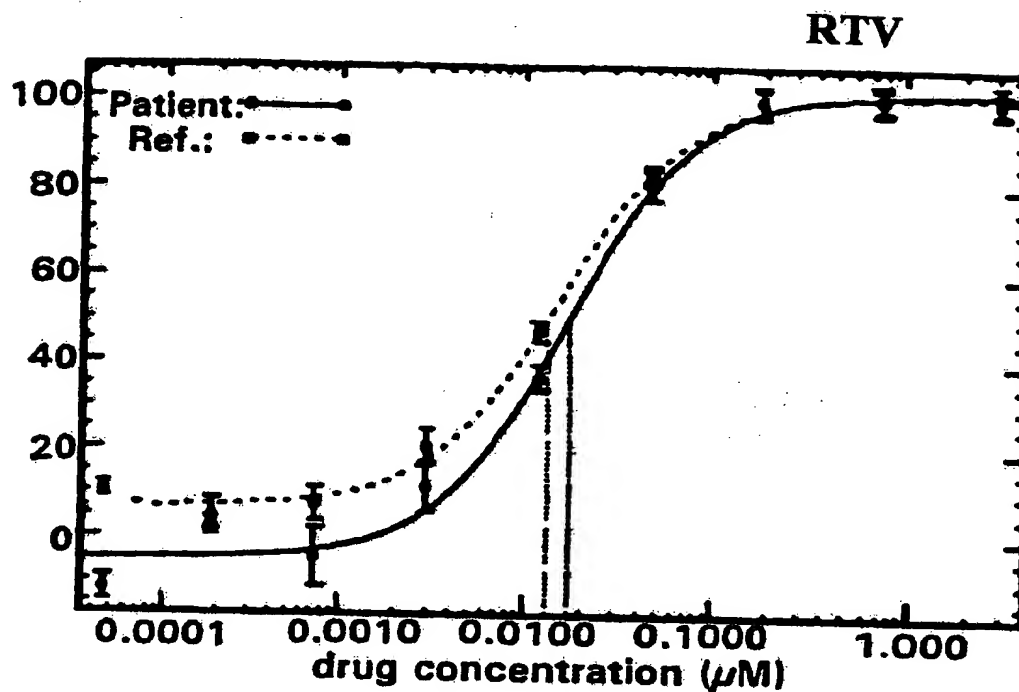


Fig. 5C

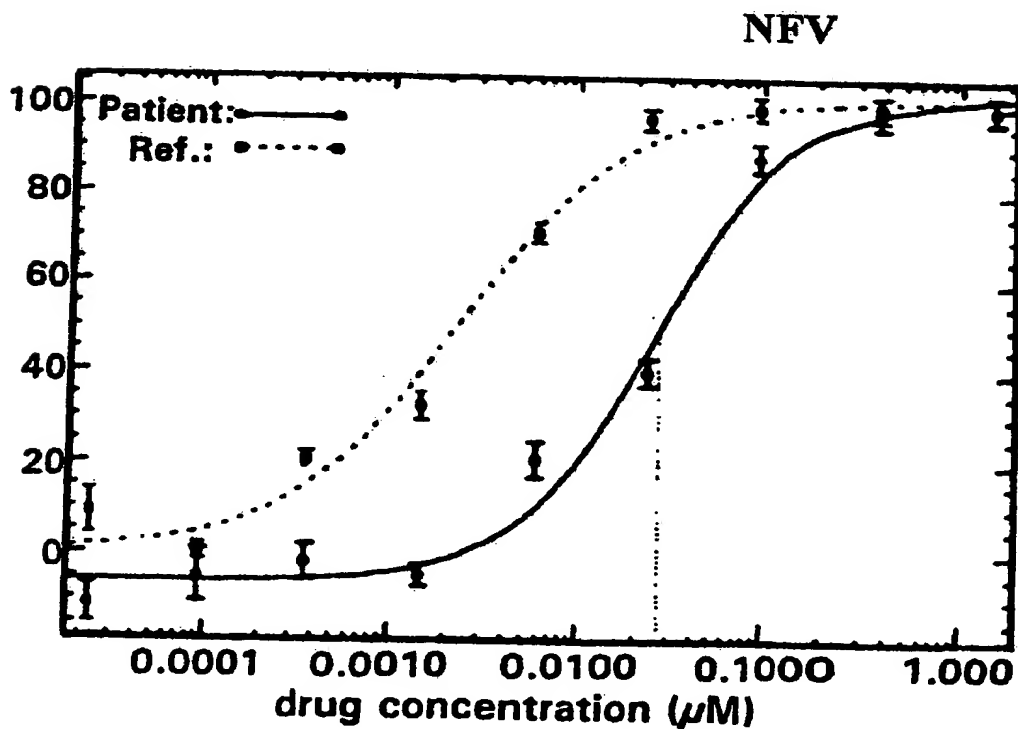


Fig. 5D

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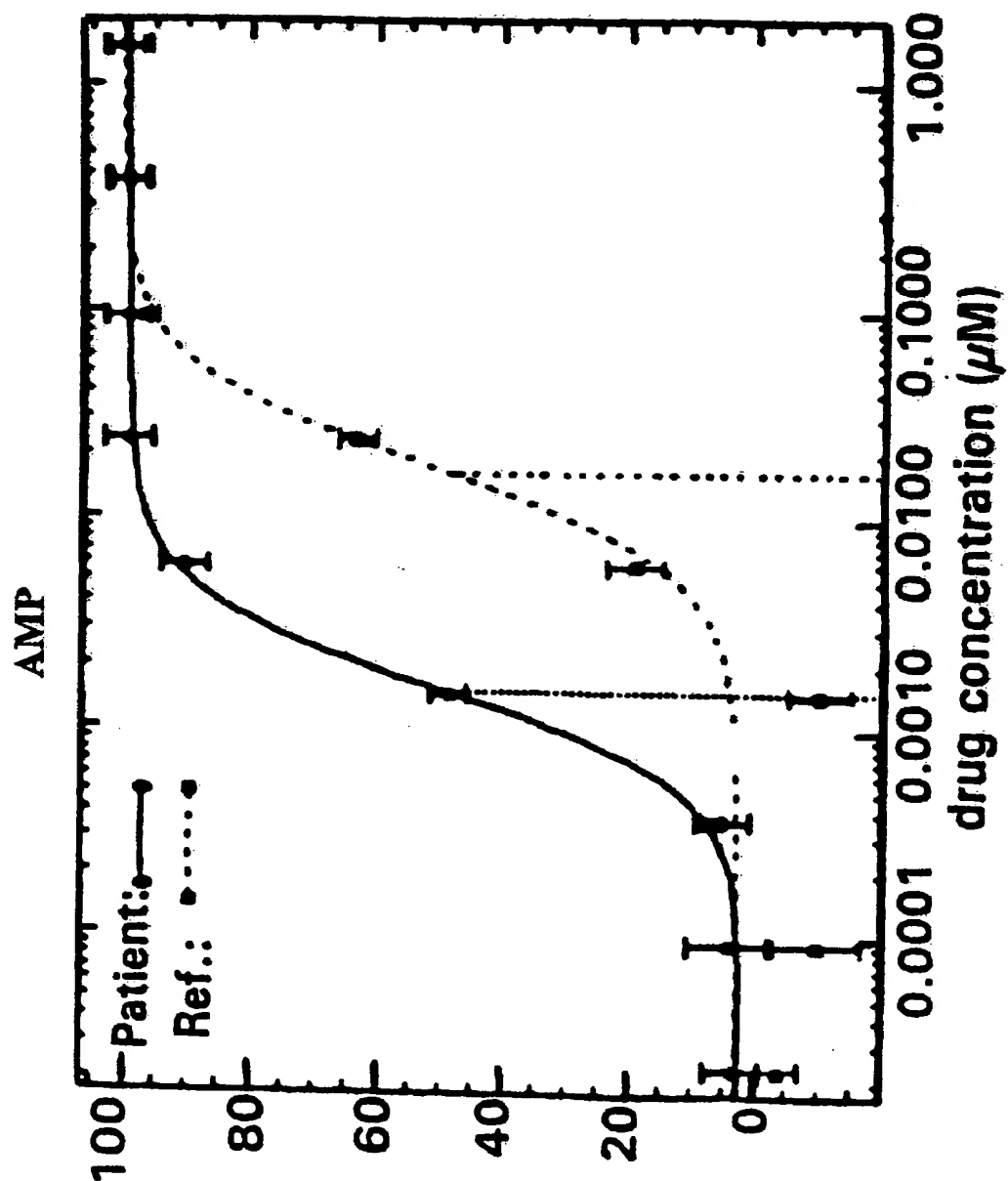
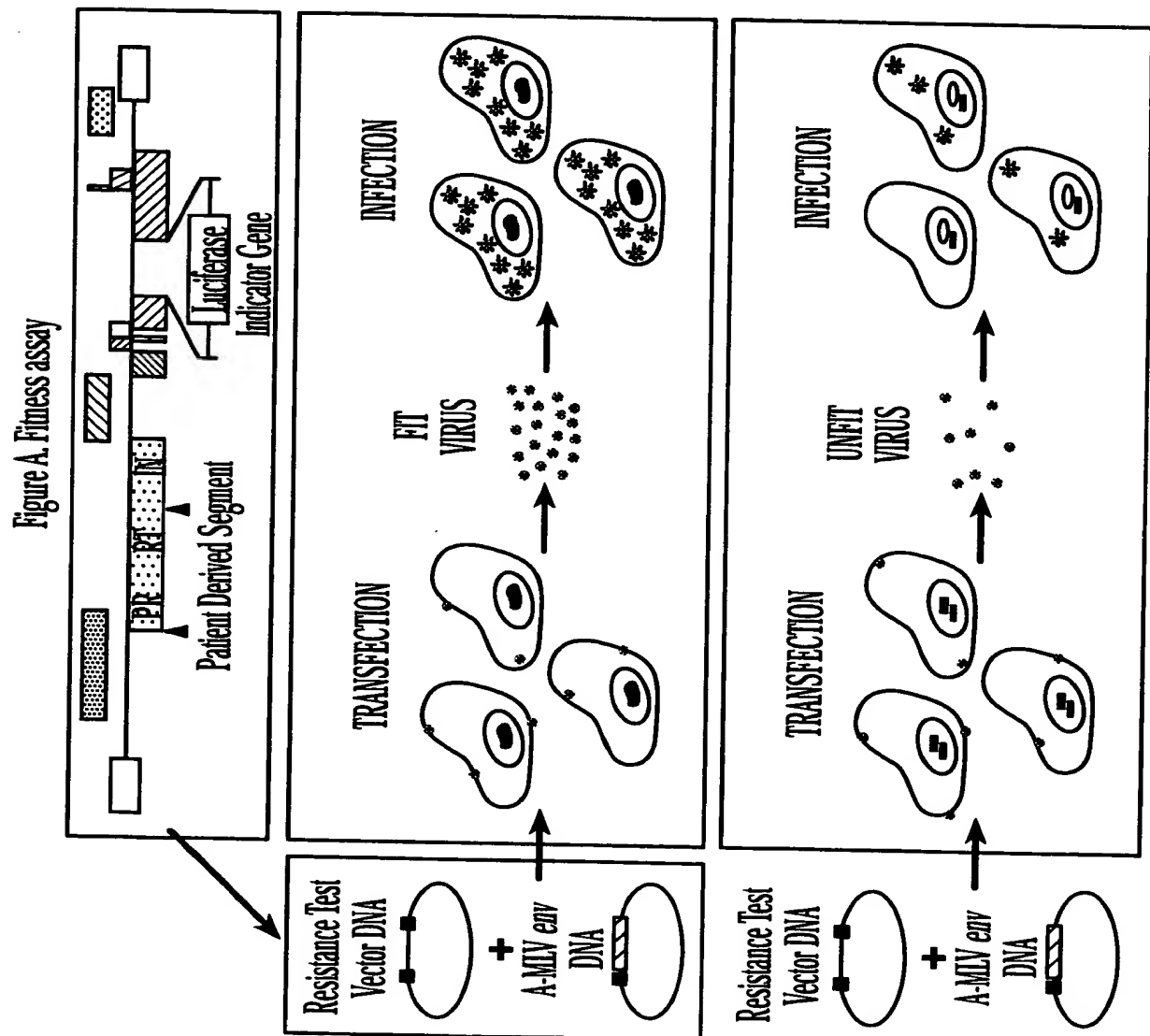


Fig. 5E

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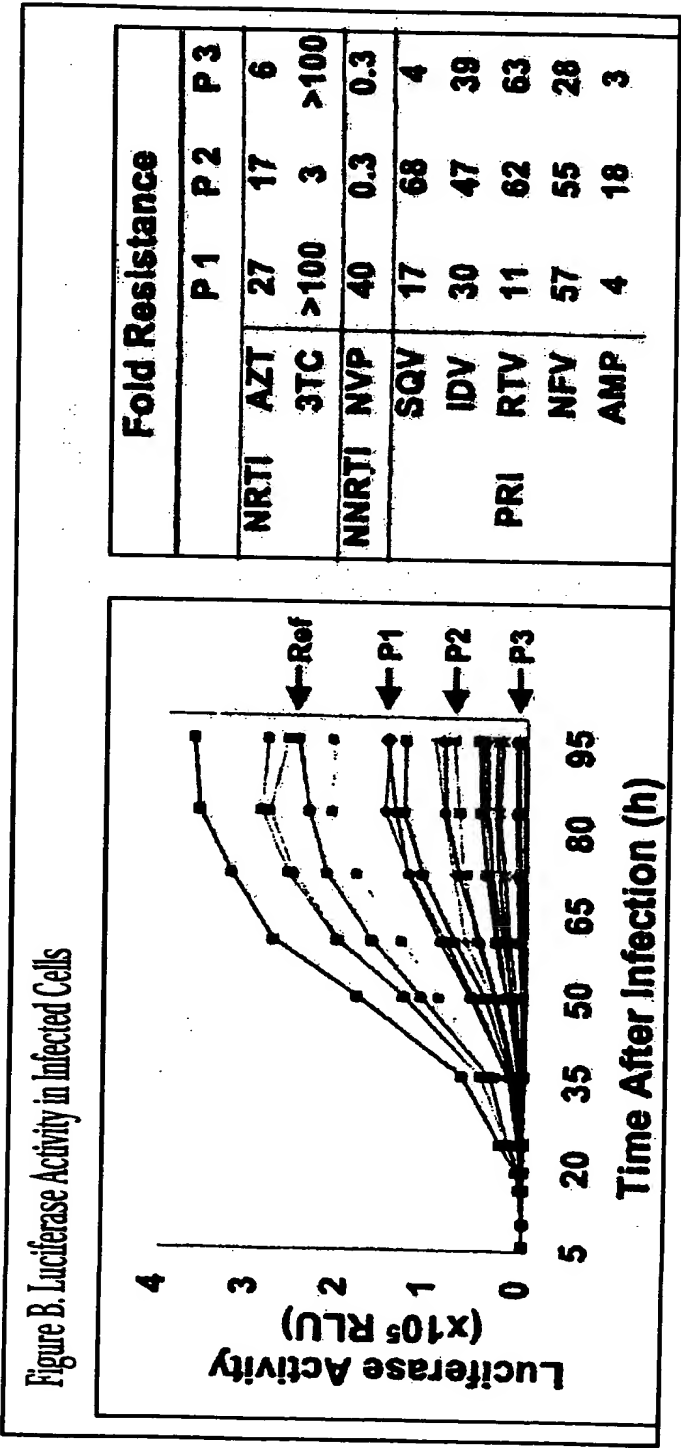


Fig. 6B

Fig. 6C

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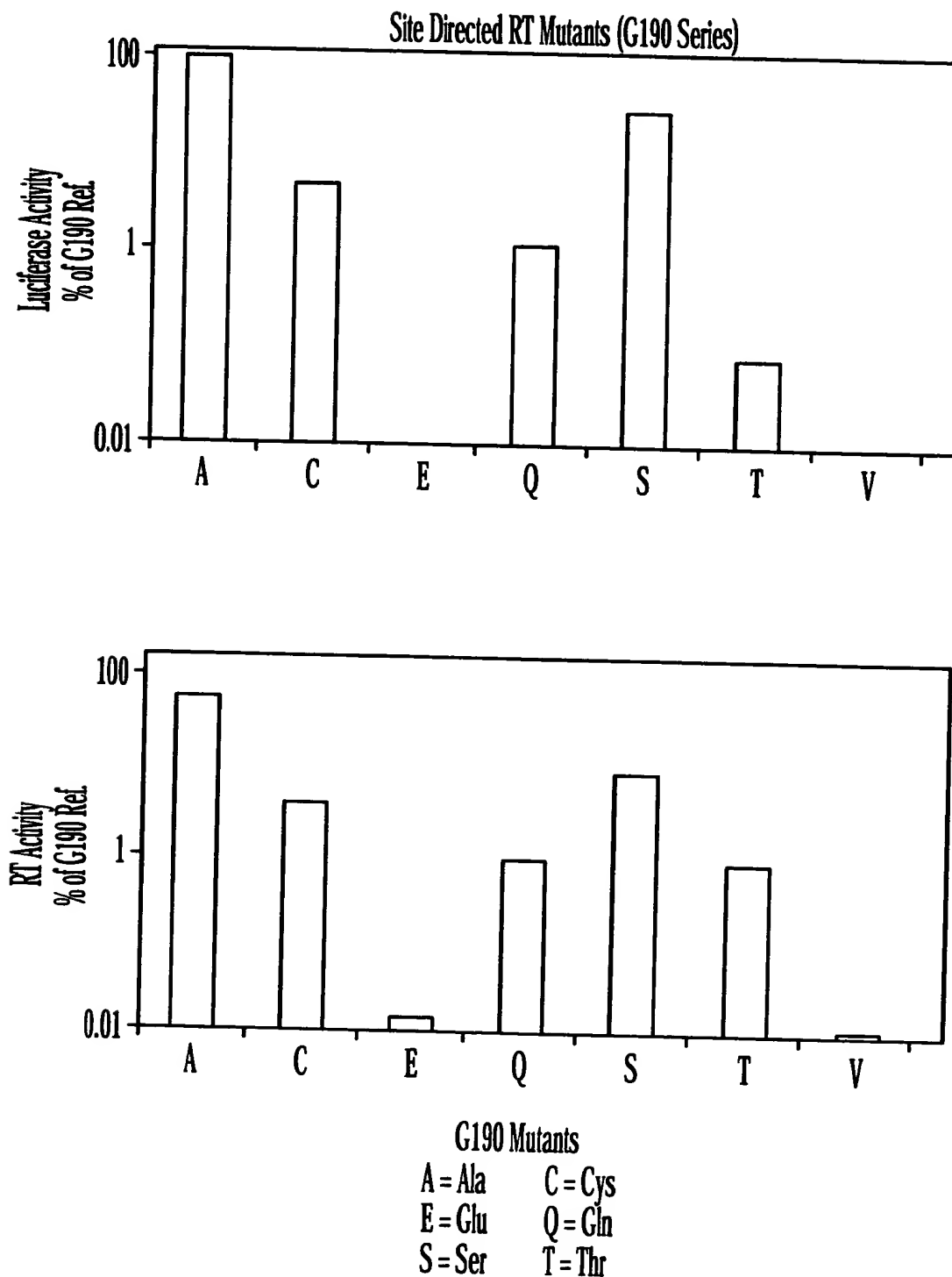


Fig. 6D

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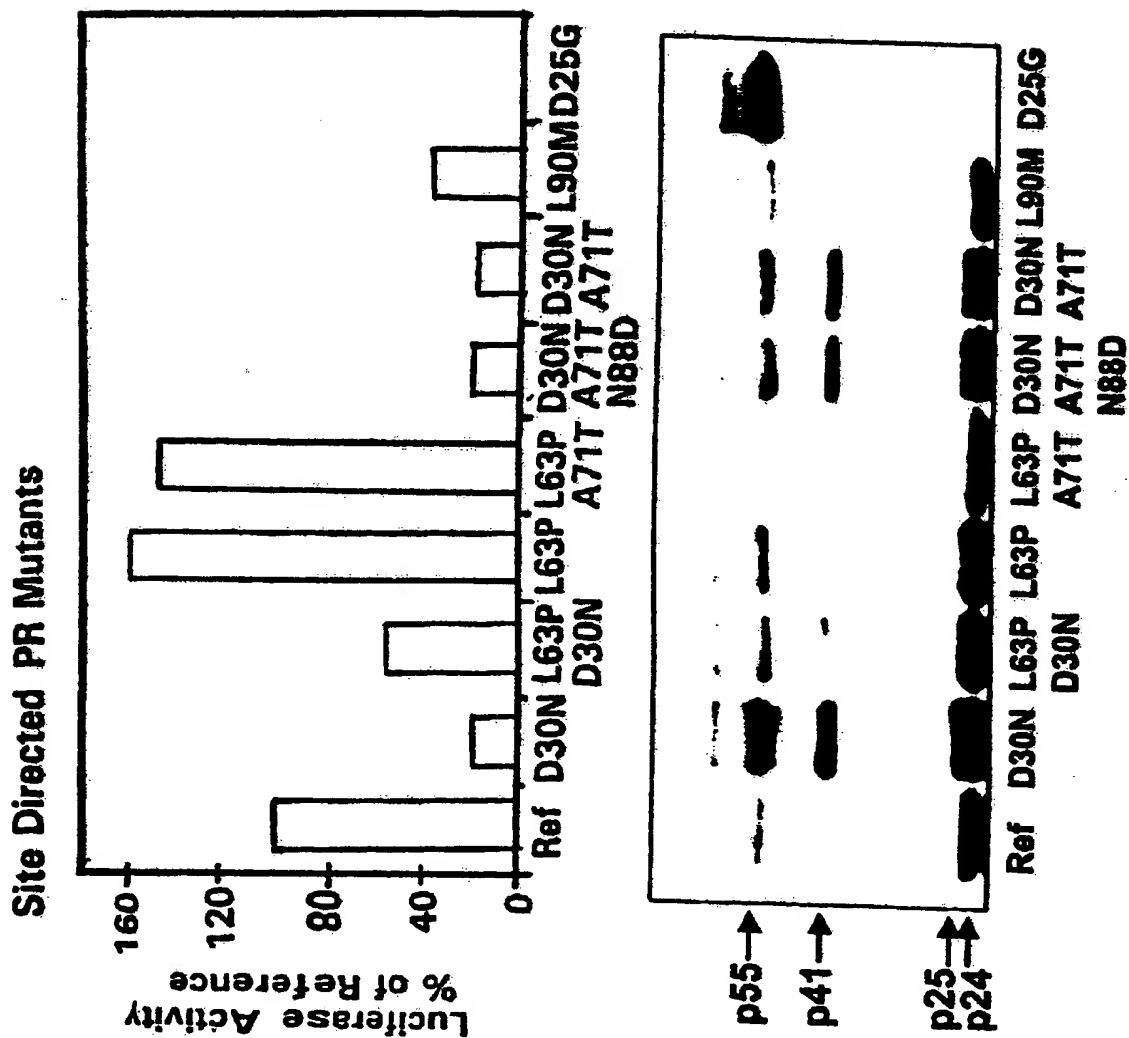


Fig. 6E

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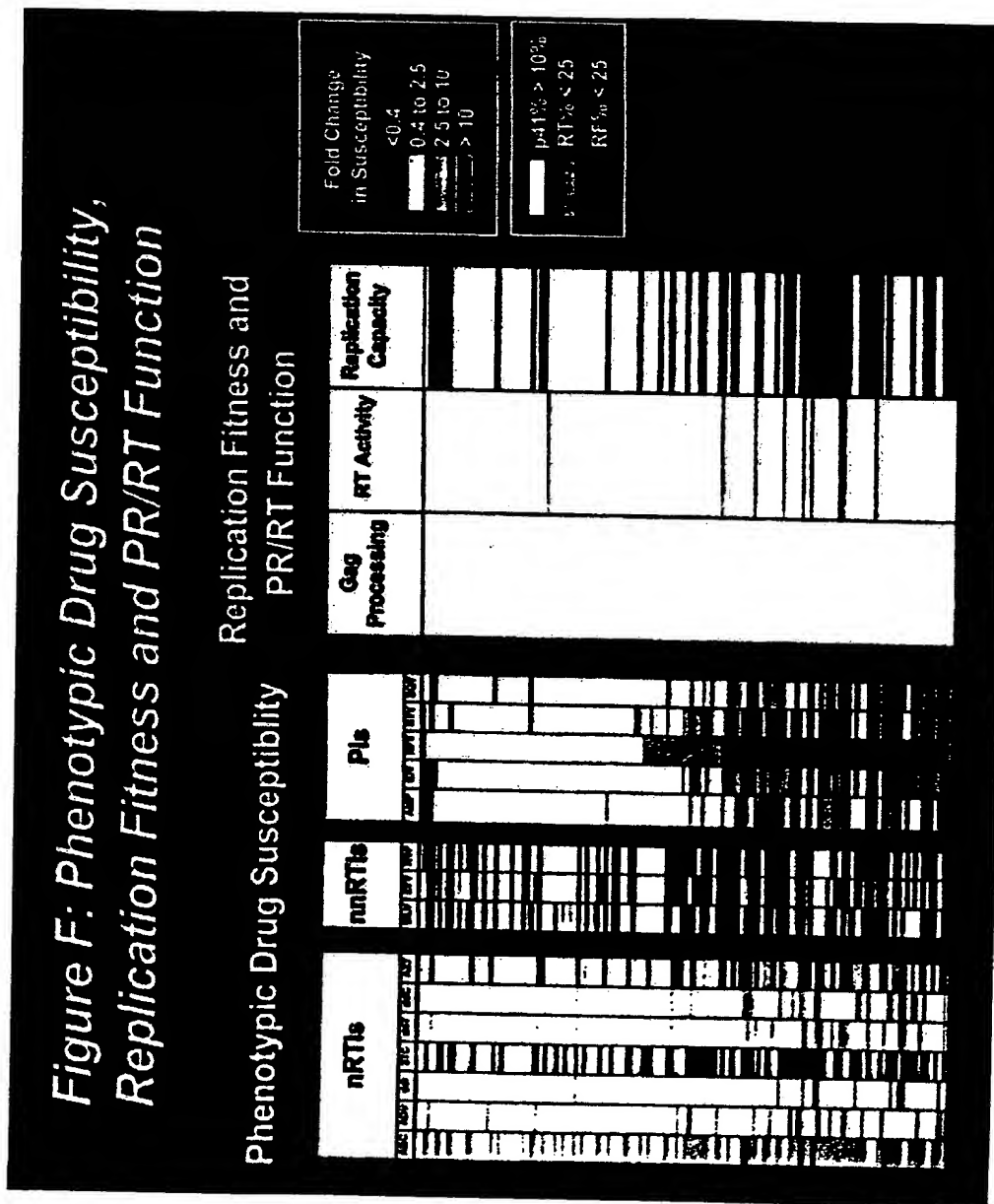


Fig. 6F

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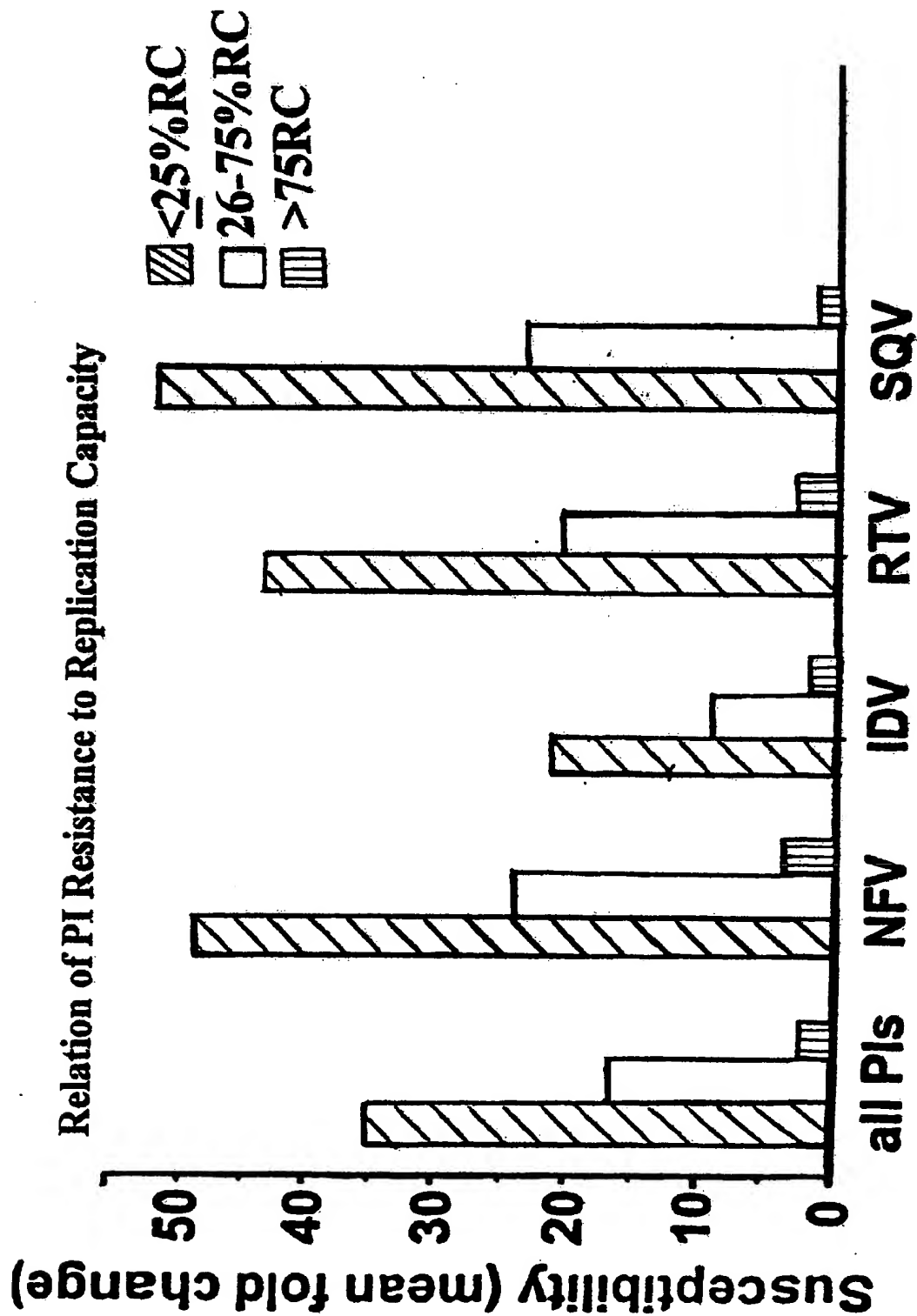


Fig. 6G

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Relation of NRTI and NNRTI Resistance to Replication Capacity

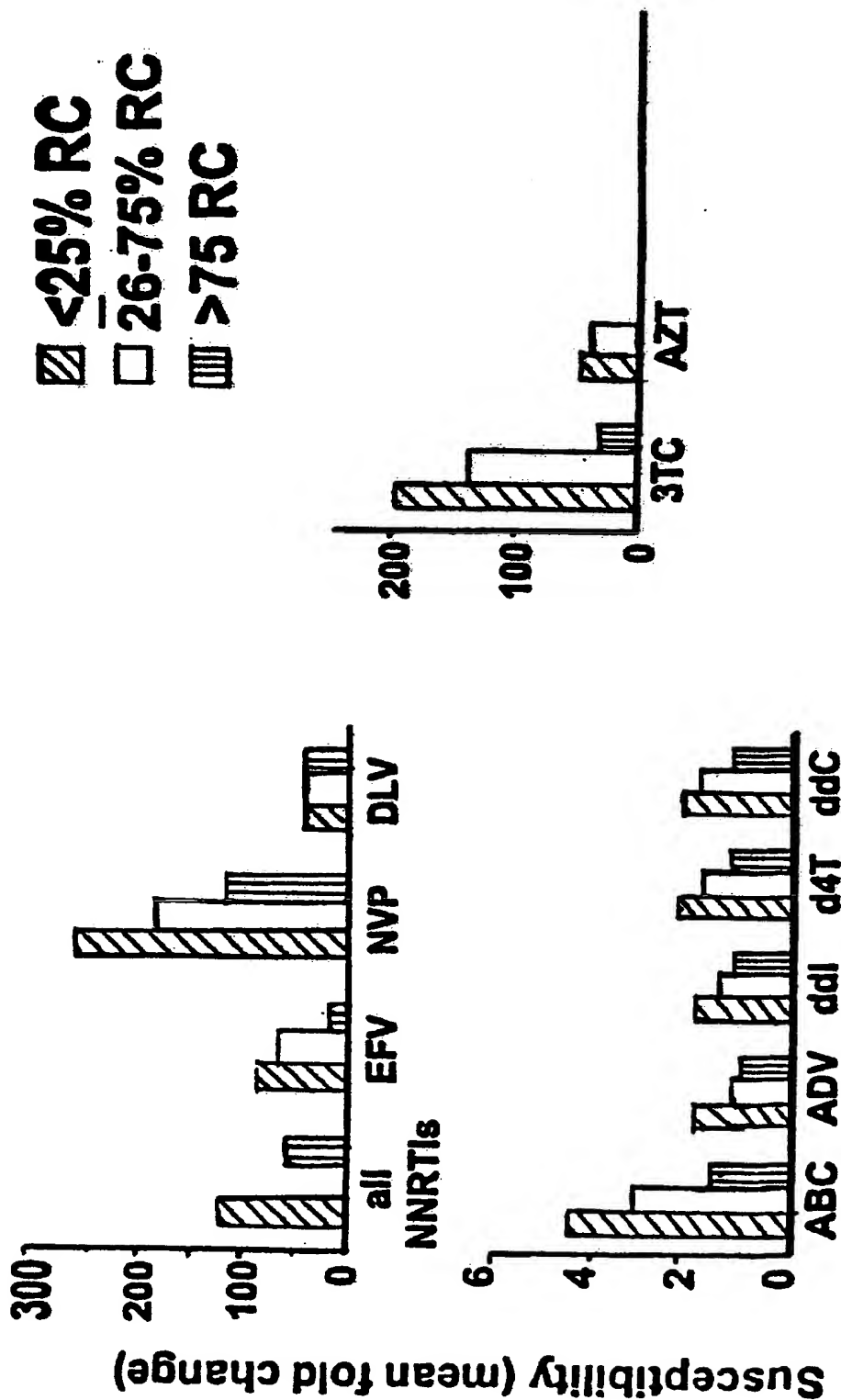


Fig. 6H

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**Low Replication Capacity is Associated with High
Numbers of Mutations in Protease and L90M**

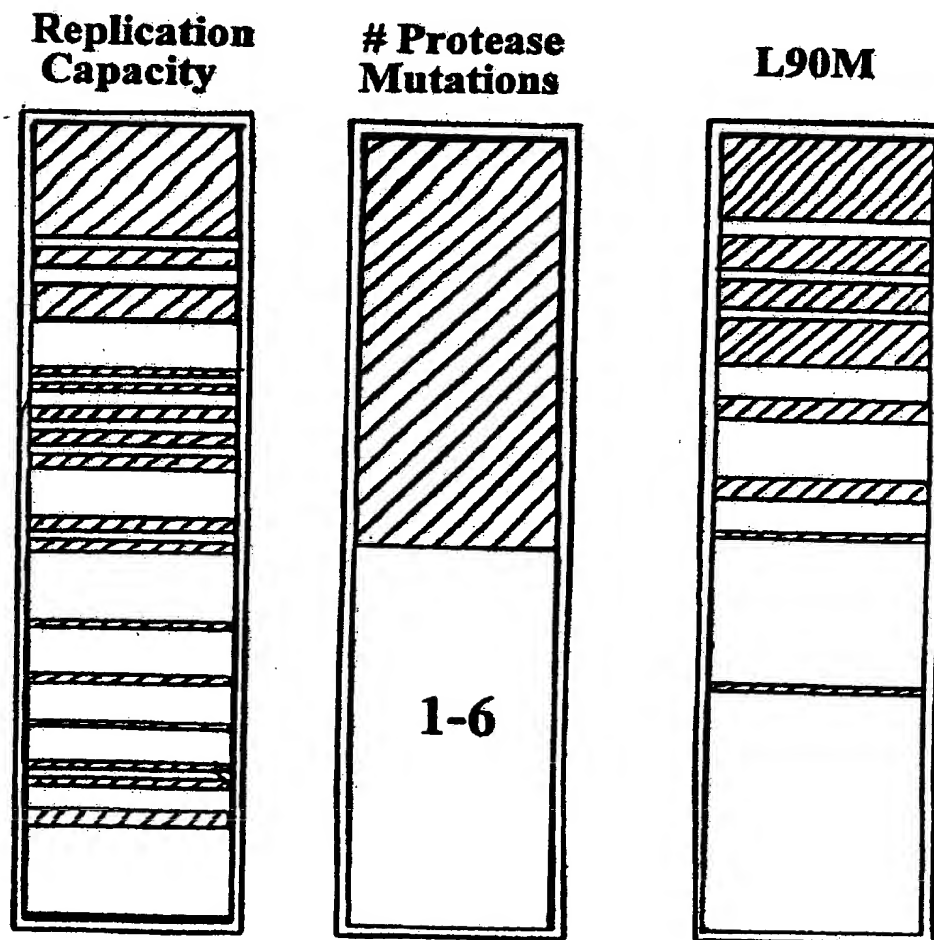


Fig. 6I

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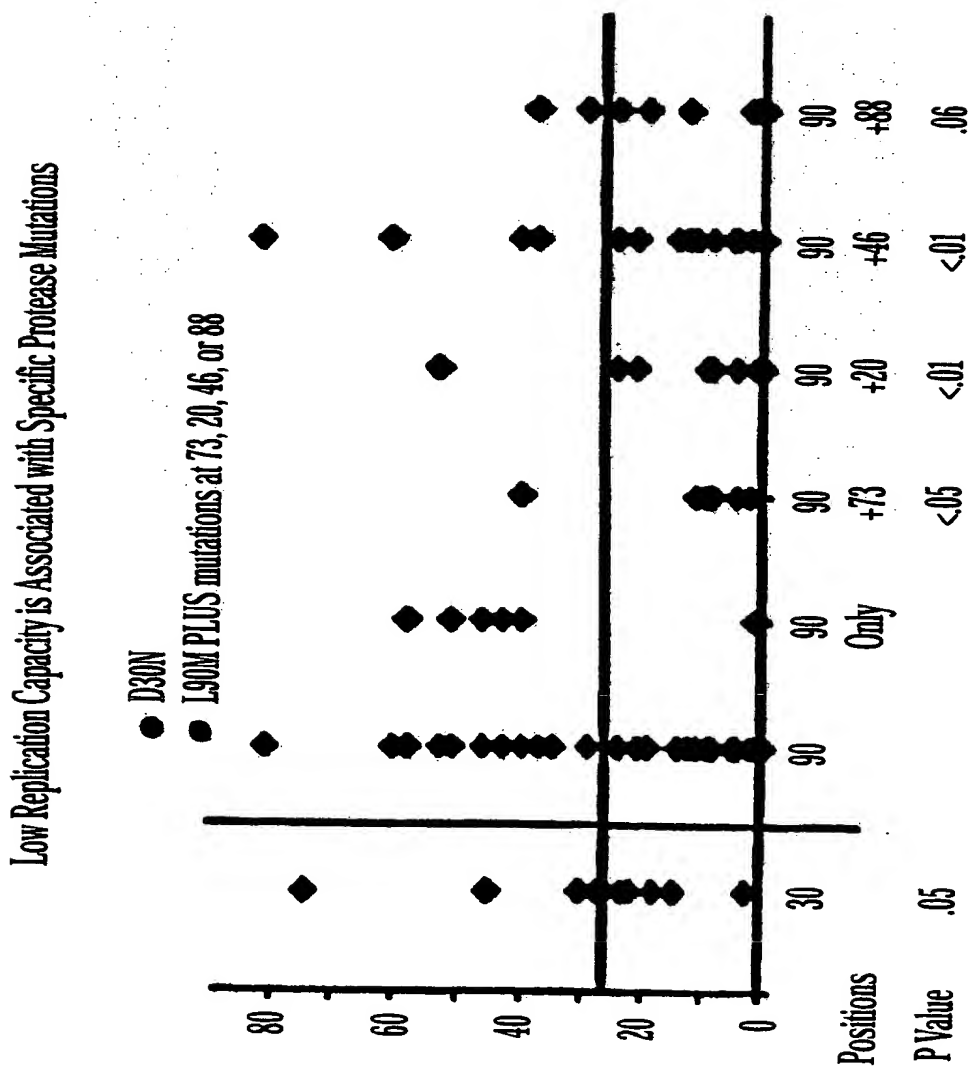


Fig. 6J

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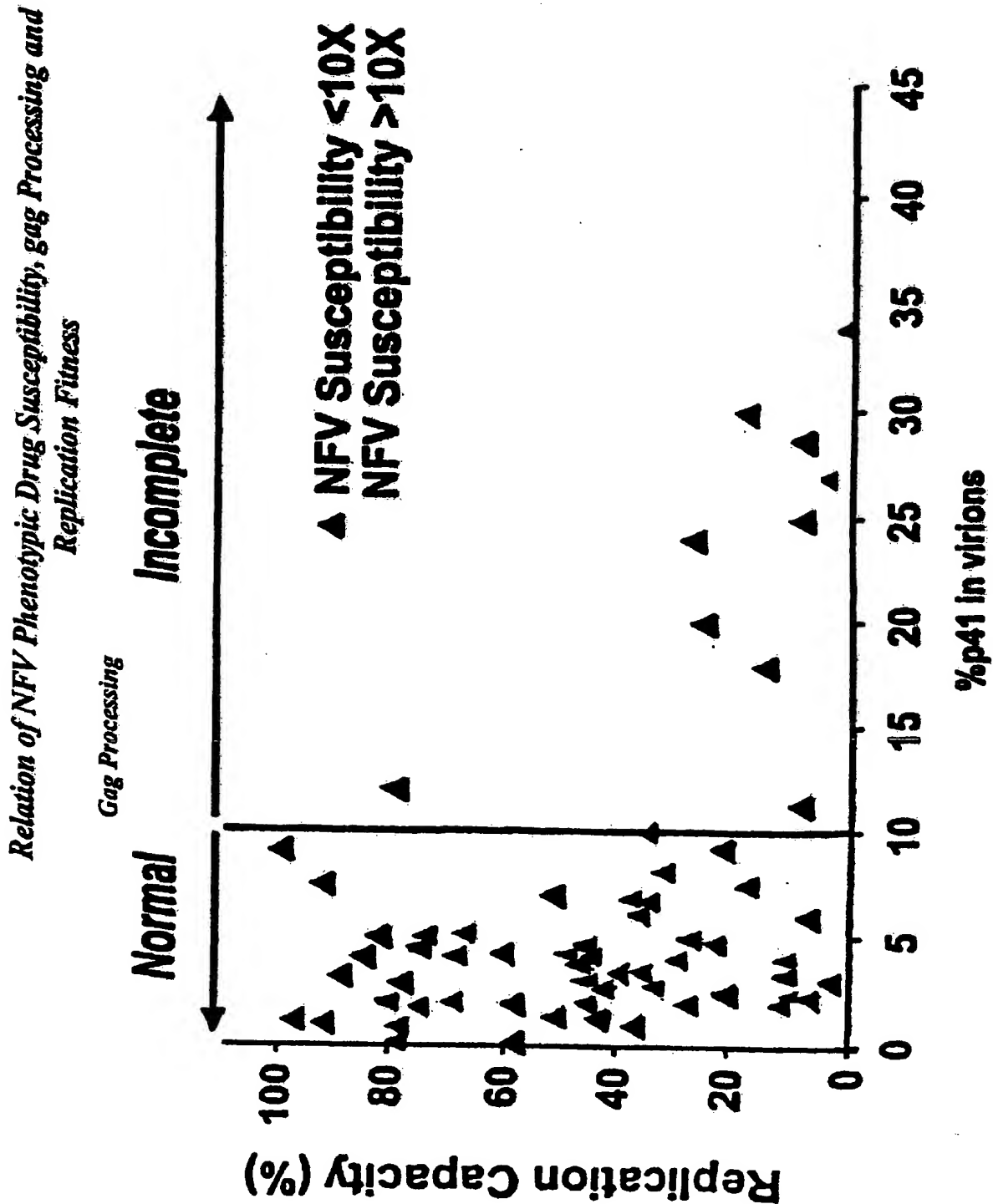
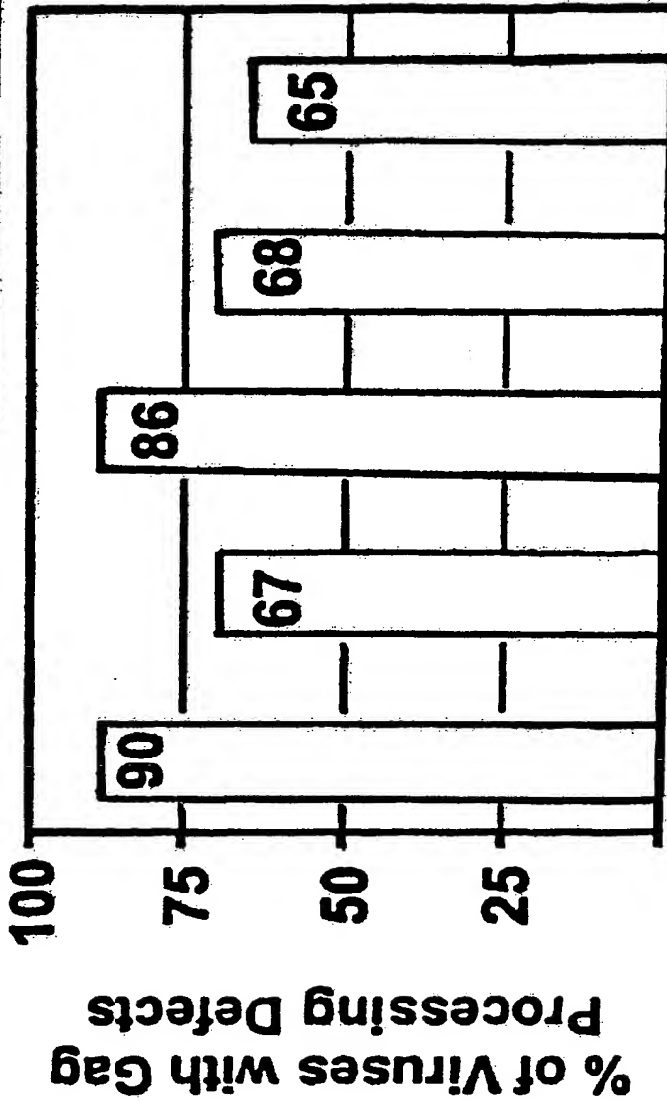


Fig. 6K

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Mutations in PR Associated with Gag Processing Defects

D30N M46I/L G48V 154L/A/S/T/V 184V



Position

30 46 48 54 84

p value

<0.1% <0.1% <1% <0.1% <1%

n

10 24 7 19 17

Fig. 6L

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Patient Virus Reversion to Drug Susceptibility After Treatment Interruption

WEEK	NRTI					NNRTI					PI				
	AZT	3TC	D4T	ABC	NVP	DLV	EFV	SQV	IDV	RTV	NFV	AMP			
day 0	3.7	>100	2.8	19	>300	88	115	85	72	73	74	16			
1	4.5	>100	3.3	20	>300	78	134	95	74	59	80	21			
2	5.8	>100	3.2	14	>300	75	142	89	77	49	59	19			
3	6.5	>100	2.7	15	>300	96	183	59	75	52	51	15			
4	6.3	>100	3.1	15	>300	94	174	59	68	50	49	15			
5	6.4	>100	3.0	17	>300	76	119	59	60	54	36	10			
6	5.0	>100	2.8	19	>300	93	168	89	39	80	40	18			
7	9.1	>100	4.1	12	>300	89	154	85	78	53	53	19			
9	2.8	8.1	1.9	5.0	22	15	10	1.8	3.5	4.7	4.0	2.0			
10	1.5	1.7	1.1	1.3	1.7	2.0	1.6	0.9	1.6	1.9	1.8	1.6			
11	0.9	1.2	1.0	1.2	0.8	1.1	0.9	1.0	1.1	1.1	1.1	1.0			
12	0.8	1.3	0.8	1.2	0.5	1.0	0.8	0.8	0.8	0.9	1.1	0.8			
23	0.7	1.1	1.0	0.6	0.8	1.1	0.8	0.8	0.8	1.0	0.9	0.6			

Fig. 6M

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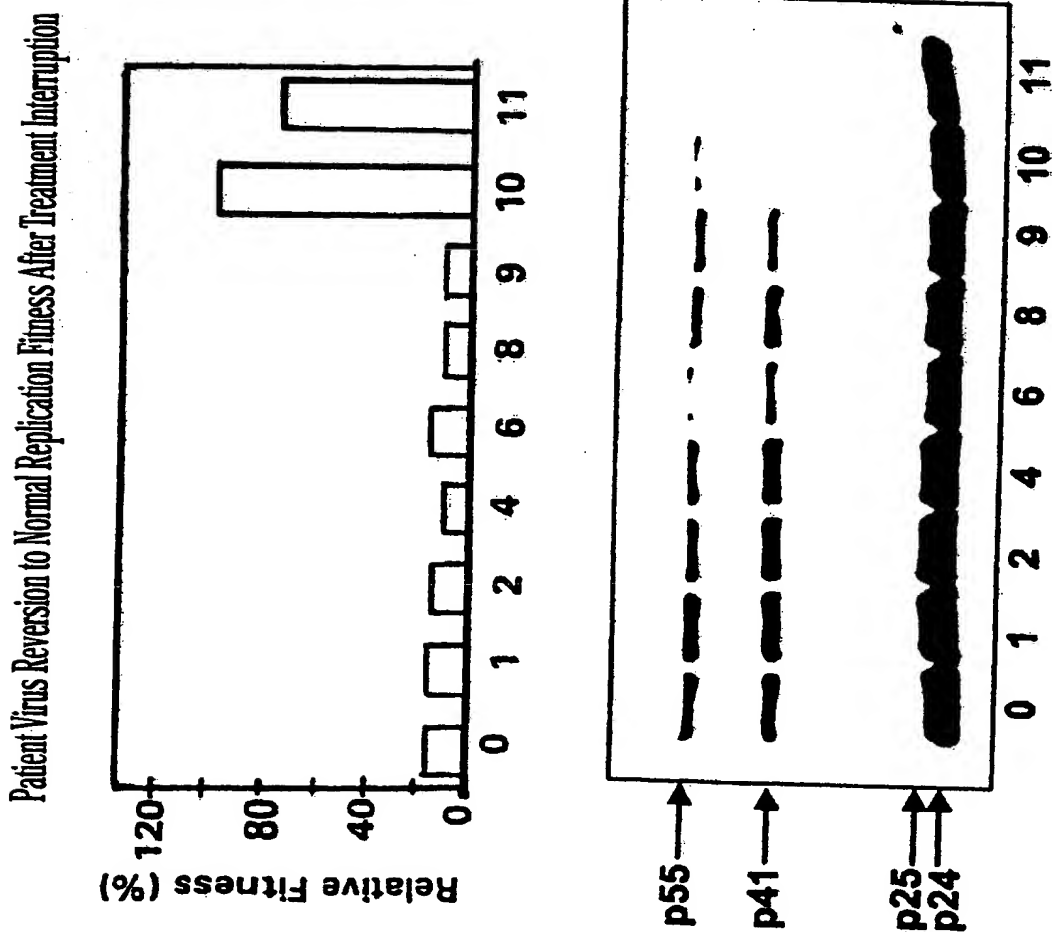
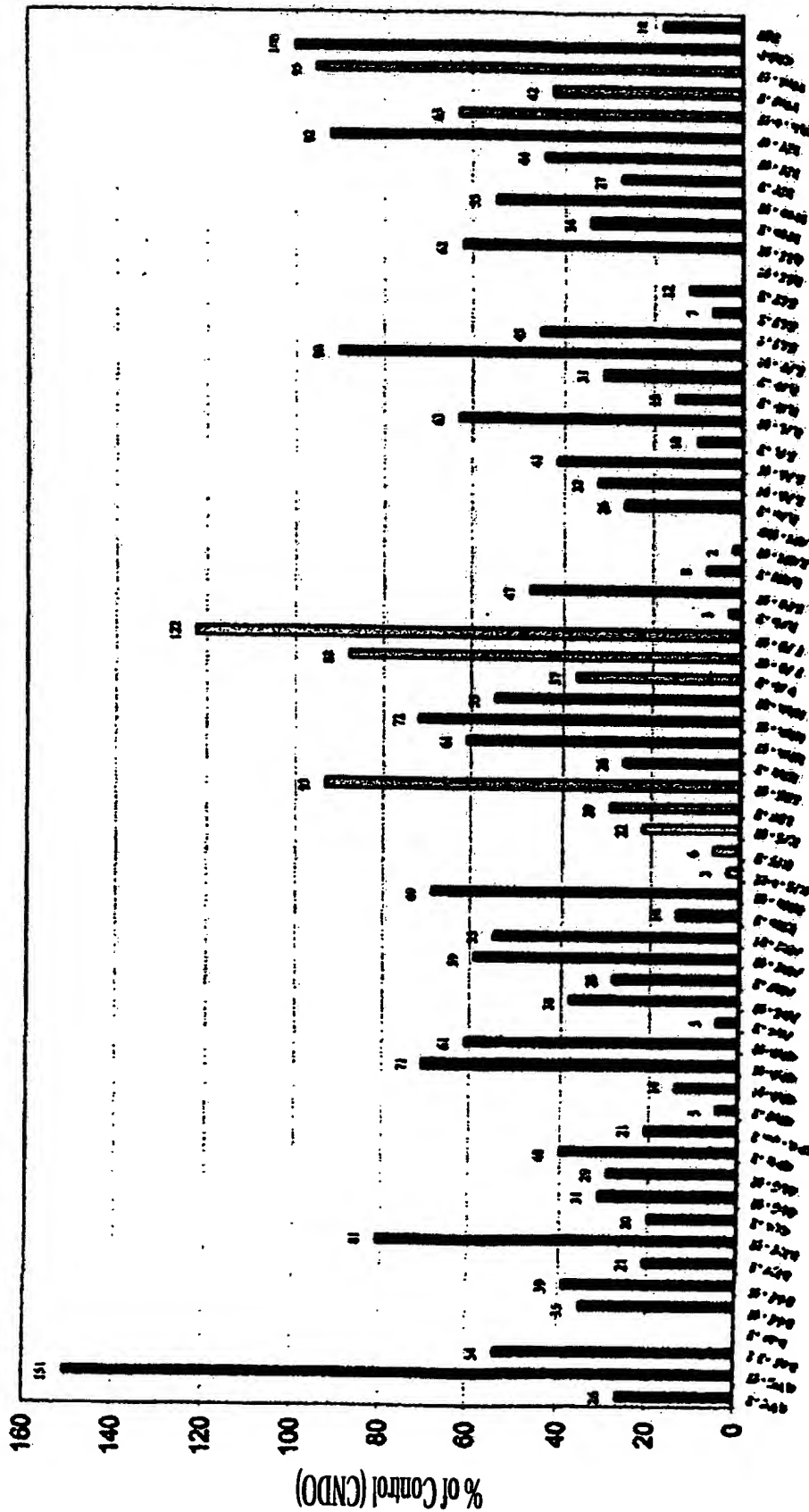


Fig. 6N

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Fitness on GCRC STI Samples (wk 0 and 12)-Assay #2 RLU Corrected for p24 Input (% of Control)



Patient Post STI
 Fig. 60

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To Measure Replication Capacity of Patient-Derived Viruses

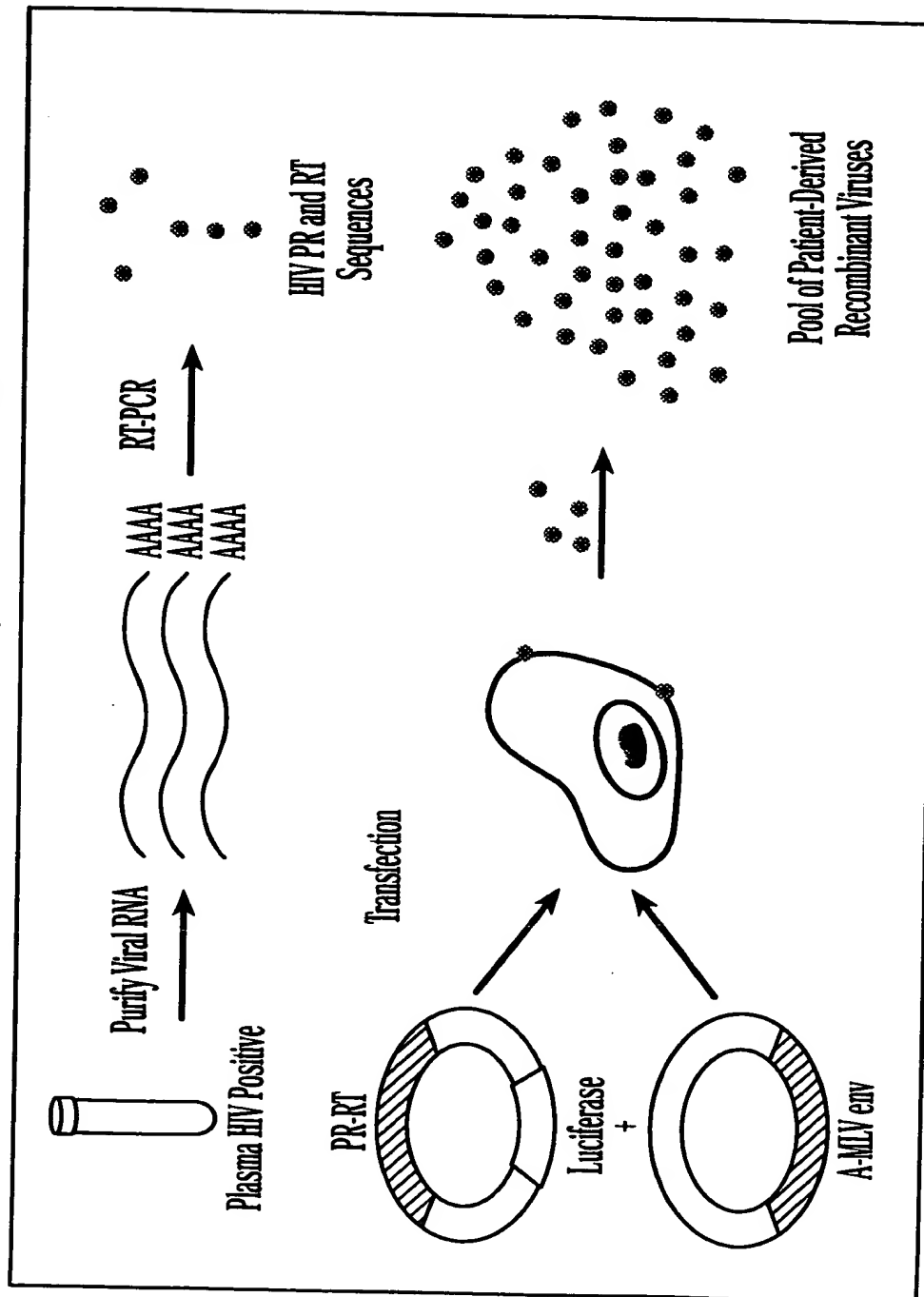


Fig. 6P

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To Measure Replication Capacity of Patient-Derived Recombinant Viruses

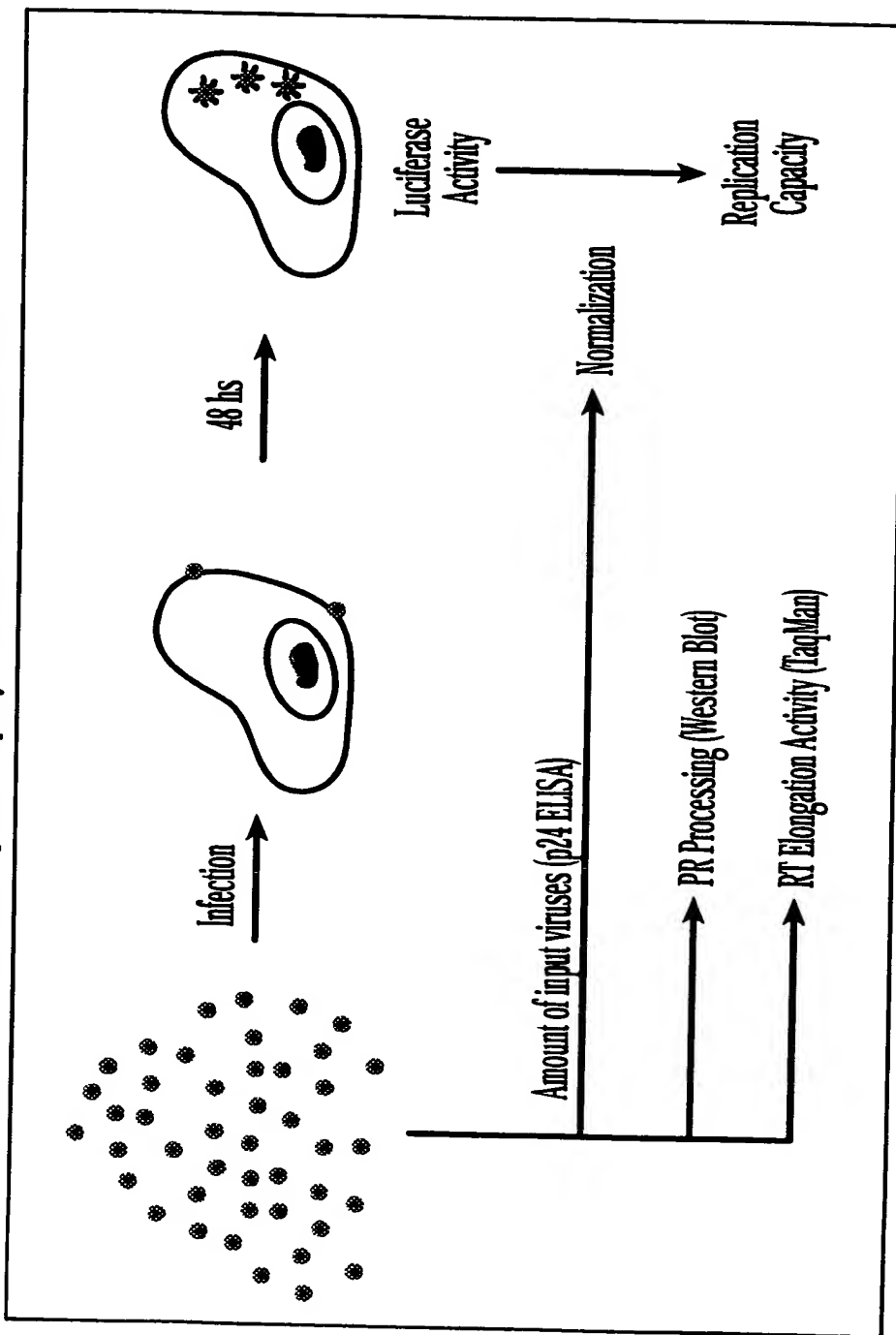


Fig. 6Q

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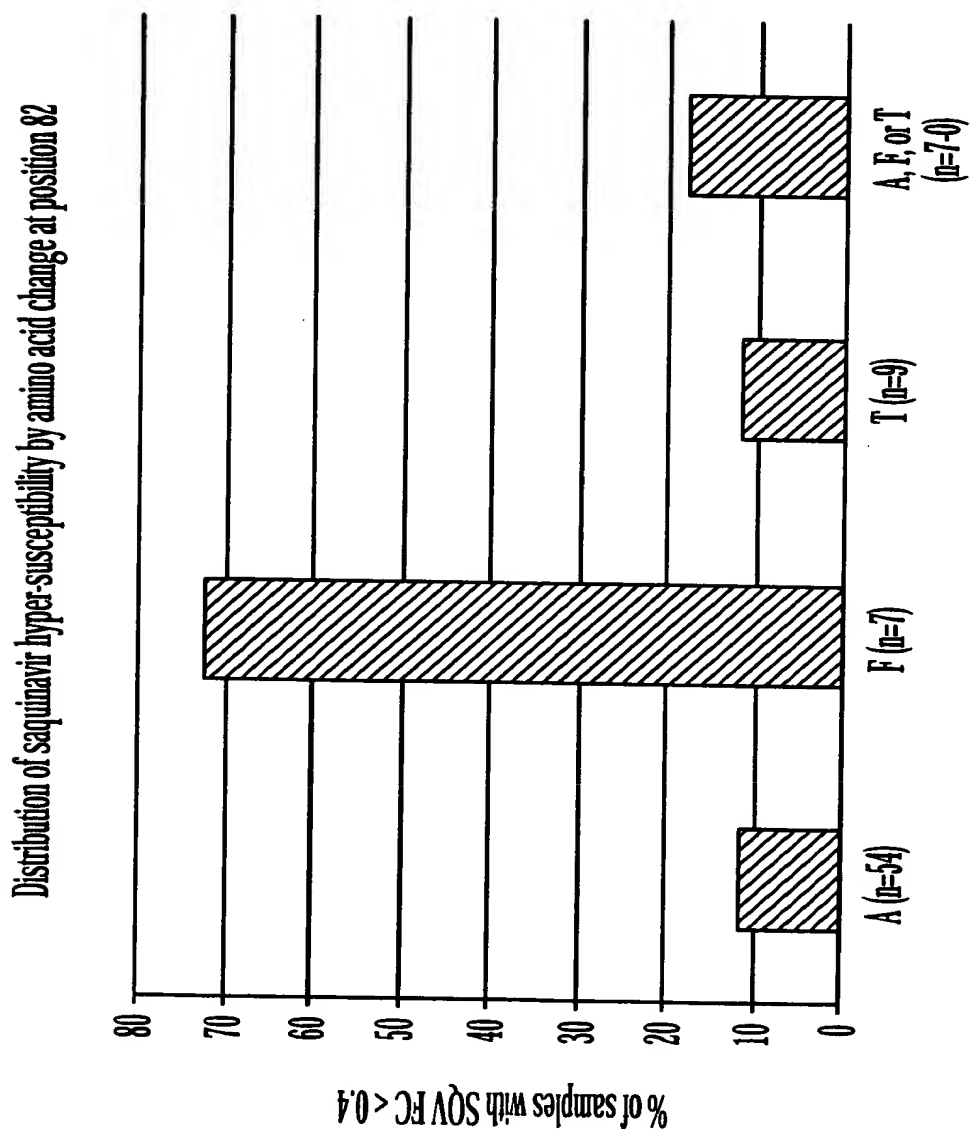


Fig. 7

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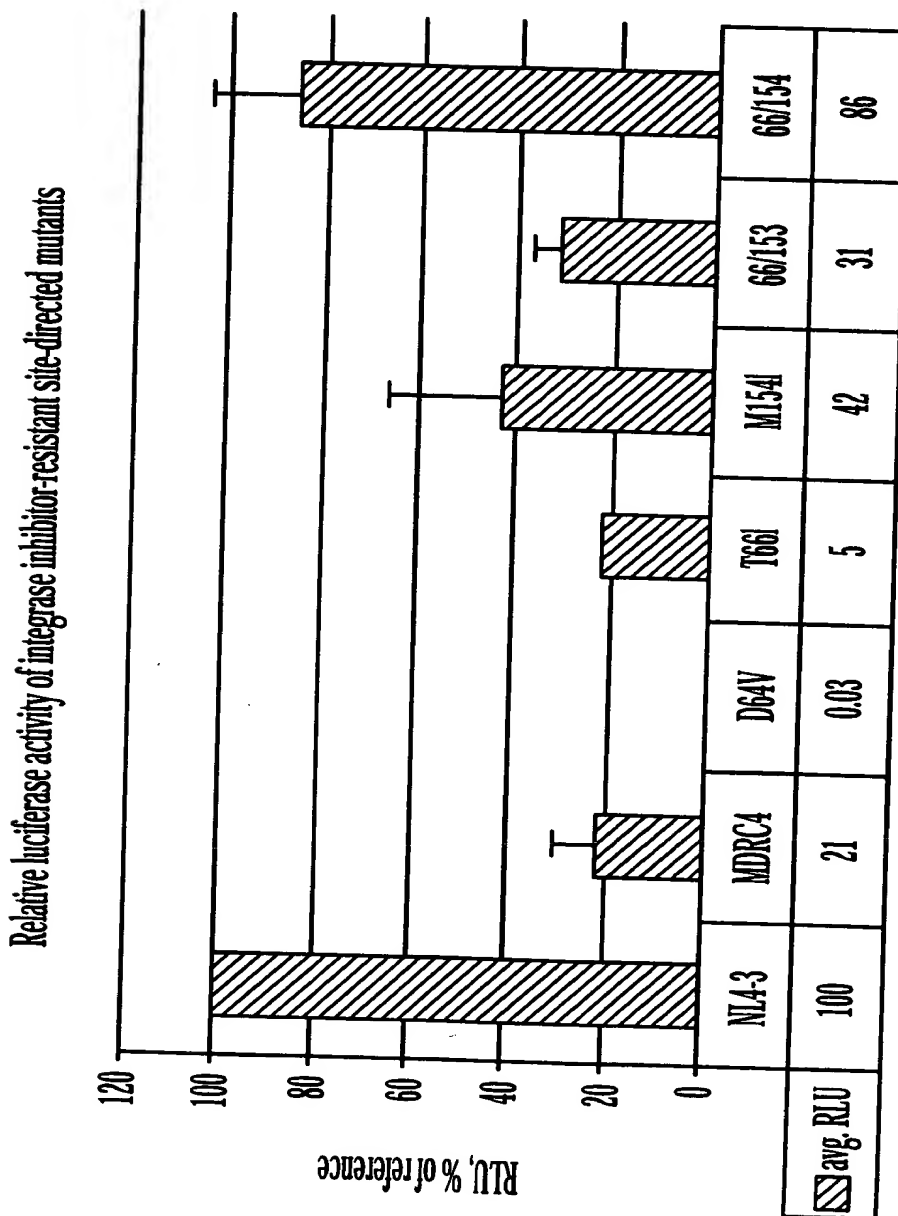


Fig. 8

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